

StorageCARE OLB Installation Manual

Installation Manual

Brief Objective: This document is used to help with the initial install of both CentralControl Software and Agent Software

Document Revision: 1.01
File Name: Installation Manual.doc
Date: 6/19/2003
Author: DWG

Table of Contents:

Executive Summary	4
Overview	5
Agent Software	6
Central Control Software	6
Director Software	6
Installation of StorageCARE OLB Central Control	7
Installation Requirements	7
Installation Procedures	7
Agent for Windows Installation	8
Agent for Netware Installation	11
Agent for Linux Installation	14
Contact Information	16

Executive Summary

StorageCARE OLB provides secure and efficient networked data protection and recovery solutions for organizations facing exploding data growth, increased regulatory requirements and limited IT resources—in both budget and work force. By taking advantage of our StorageCARE OLB core technology, you can look colleagues in the eye and tell them their data access will be unencumbered by disasters, outdated operating system versions or just simple human error.

Organizations using StorageCARE OLB will be able to consolidate data protection and recovery processes under a single vendor, streamline, and automate what can be a complicated process. By leveraging existing infrastructure and StorageCARE OLB innovative storage, encryption and data transport technologies, companies will gain the following advantages:

- ? **Simplicity** – StorageCARE OLB provides a single solution that stores, retrieves and migrates data throughout a company's data lifecycle
- ? **Added Security** – StorageCARE OLB keeps data encrypted throughout the entire data migration process
- ? **Fast** – By providing disk-to-disk backup, coupled with our DeltaPro™ technology, restore times are significantly reduced and backup windows substantially shrunken
- ? **Efficiency** – StorageCARE OLB compression and storage pooling capabilities enable a higher number of retentions while requiring less desk space
- ? **Cost-Effective** – Fewer vendors to manage, less hardware to buy, we provide solutions priced for the true mid-tier market

Contained in this document are the steps necessary to install the StorageCARE OLB CentralControl, Create a Backup Task, and Manage that Task.

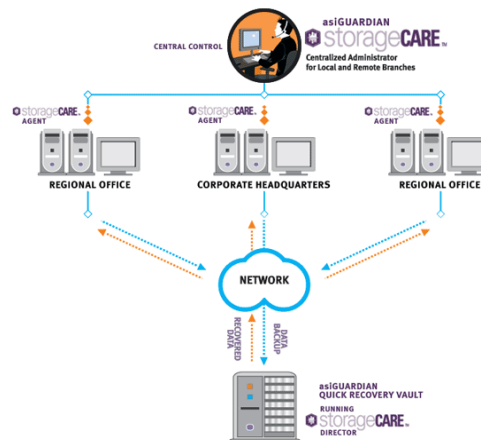
StorageCARE OLB - Installation Manual

The stakes for rock-solid information protection and recovery get higher every day. When faced with inadequate data access, organizations suffer significant productivity interruptions and subsequent revenue losses. IT staff are expected to maintain increased regulatory compliance, support multiple platforms and applications and keep expenditures under tight capital budgets.

The asiGuardian's StorageCARE OLB solution is designed specifically for mid-tier organizations requiring efficient, secure and cost-effective data protection and recovery without the hassles of traditional backup such as system obsolescence, media management and minimal security.

Overview

StorageCARE OLB is comprised of three distinct components: 1) Agent Software, 2) CentralControl Software, and 3) Director Software. The Agent resides on the source server at the source site, the CentralControl resides on a management workstation/server at the source site, and the Director resides on a target server at the target site. Source Server is the server that is being backed up, Source Site is typically the customer's site the Target Server is the data vault comprised of highly fault tolerant servers, and the Target Site is the highly-available, bunkered facility that is the destination for your data. How these three programs interact is represented in the graphic below:



Agent Software

The Agent Software runs on the individual computers to be backed up. It enables communication between the computer running the Agent, CentralControl, and Director. Agent Software runs on all of the following Operating Systems:

- | | |
|--------------------------------|---------------|
| ? Windows XP | ? NetWare 4.2 |
| ? Windows NT Workstation 4.0 | ? NetWare 5.0 |
| ? Windows NT Server 4.0 | ? NetWare 5.1 |
| ? Windows 2000 Professional | ? NetWare 6.0 |
| ? Windows 2000 Server | ? Solaris 7 |
| ? Windows 2000 Advanced Server | ? Solaris 8 |
| ? Red Hat Linux 6.2 | ? IBM AIX 4.3 |
| ? Red Hat Linux 7.1 | ? HP-UX 11 |

Along with these agents, there are application specific optional agents. These application agents are:

- ? Microsoft Exchange Server Plug-In
- ? Microsoft SQL Server Plug-In
- ? Oracle Plug-In

The agent only provides for connectivity to that specific OS or application; the CentralControl is the application that is used to manage the backups and restores.

CentralControl Software

CentralControl provides a centralized point of control for managing all control for managing all computers running the Agent Software on a large computer network. Generally within an organization, the configuration and scheduling of backup and restore tasks is done through the CentralControl software. This application can run on Microsoft Windows NT 4.0, Microsoft Windows 2000, and Microsoft Windows XP Professional.

Director Software

The Director Software resides on the servers at the target site. This software manages the pools of data to which data is stored.

Now that you have heard how StorageCARE OLB can help protect your data, we would like to have you put it to the test. With the help of this document, you will be able to install the software for StorageCARE OLB (CentralControl and Agents).

Installation of StorageCARE OLB CentralControl

This portion describes the steps required to install the CentralControl application. The installation requires that you have the CentralControl installation kit and Windows NT 4.0, Windows 2000, Windows XP Professional installed. This product, when installed allows the user to communicate, configure and manage one or more agents.

Installation Requirements

HARDWARE

- ⌘ CPU – Should meet basic requirements of your operating system, as prescribed by Microsoft
- ⌘ HDD – 10MB of available disk space

SOFTWARE

- ⌘ OS – Windows NT4 (SP6a) / Windows 2000 (sp2)
- ⌘ Network – A TCP/IP stack

PRIVILEGE REQUIREMENTS

- ⌘ The Installation of the CentralControl does not require any privileges if you are installing on Windows NT 4 – Backup Files and Directories
- ⌘ If you are installing on Windows 2000, you need Administrator privileges

Installation Procedures

1. Log onto the system
2. Find and Double-Click on the self-extracting executable file (CentralControl.exe) to start the installation process.
3. A Prompt appears, asking to confirm installation of the product. Click **YES**, and the NOTICE page appears
4. From the NOTICE page, you can view support and contact information, as well as product release notes. Click **NEXT** to proceed with the installation. The License Agreement Panel appears.
5. Click **ACCEPT** and **NET** for each of the products you are installing. There are two pages total, one page for the OLB Software, and one for the OLB Encryption Software
6. Select the system drive or the drive with the most free space. The default install location is C:\PROGRAM FILES\STORAGECARE OLB. If you want to install the CentralControl application in the default directory, click **NEXT**.
7. Enter the username and password of the system being backed up. The user profile must have a minimum of “Backup Files and Directories” rights. Click **NEXT**.
8. If a shortcut on the desktop is desired, please choose “YES” when asked, otherwise choose “NO.”
9. From the Installation Wizard Complete panel, you can choose to launch the README file and/or the CentralControl application. To do so, click the desired item(s) and click **FINISH**.

Agent for Windows Installation

This chapter describes the steps required to install the Agent under Windows NT4 Server, Windows 2000 Server, and Windows XP Professional systems. The installation requires that you have the Agent for Windows Installation kit. To communicate with, configure and manage the Agent, the CentralControl program must be installed on the same or a separate 32-bit Windows system.

System Requirements

HARDWARE

- ⌘ CPU
 - Minimum: Intel 80486 or 100% compatible
 - Recommended: Pentium 90 or faster
 - **NOTE:** if your operating system suggests different minimum hardware requirements, employ whichever system is greater
- ⌘ RAM – 64MB or more recommended
- ⌘ HDD – 10MB of available disk space

SOFTWARE

- ⌘ OS – Windows NT4 Server (sp6a) / Windows 2000 (sp2)
- ⌘ Network – TCP/IP
- ⌘ Optional Under NT4 Server / Windows 2000 Server
 - Open Transaction Manager OTM 1.11 Build 147 for Windows OTM 1.11
 - Open File Manager – OFM 8.1

PRIVILEGE REQUIREMENTS

- ⌘ Installation – To install the Agent for NT 4 Server / Windows 2000 Server / XP Professional, Administrator or equivalent access is required for the target machine
- ⌘ Functional – There are 3 modes of operation
 - Ad-Hoc: Using the CentralControl application, the user can configure, backup and restore tasks on an Agent. The specified user must have the "backup Files and Directories" privilege. Alternatively a user named "vytalvault" can be created (using User Manager/User Manager for Domains) to allow Ad -Hoc mode interactions.
 - Scheduled: Backup jobs can be configured to run in scheduled mode. Using the CentralControl application, the user can schedule, backup and restore tasks on an Agent. If the VVAGENT.EXE program is run as a system service logged in under the System Account user, no special privileges are required to run scheduled jobs.
 - CLI: Command Line Interface mode allows the user logged on to the system console to execute backup and restores directly from the command line interface. Users must log in with an account that includes "Backup Files and Directories"

- privilege. This privilege is enabled by default for the Backup Operators and Administrators groups.
- o **NOTE: The initial configuration requires Ad-HOC mode privileges.**

Installation Procedure

1. Log on to the system.
2. Double click on the self-extracting executable file (Agent-Windows.exe). Install Shield sets up the installation process.
3. A prompt appears indicating the version you are about to install. Click **Yes** to proceed.
4. From the Welcome dialog, click **Next**. A viewer appears.
5. From the viewer screen, Users can read support notes and service contact information, as well as product release notes. Click **Next** to proceed. The Select Application(s) to Install dialog appears.
6. Under Windows NT Server / 2000 Server select the applications that you wish to install. Choose Agent, CentralControl, OTM, or OFM.
7. When installing the CentralControl application, be sure the Agent check box is selected. If the Agent is not selected, it will be uninstalled.
8. Click Next. The License Agreement panel appears.
9. Select Accept and click Next. Repeat this procedure for all software you are installing.
10. From the Install Path dialog, select System Drive or Drive with Most Free Space. The default is C:\Program Files\EVault. Another location can be selected by clicking Browse, choosing the destination folder and clicking OK. Click Next. The User Name and Password panel appears.
11. Enter the user name and password of the system being backed up. The user profile must have a minimum of "Backup files and directories" rights. Click Next. The Default Setup Complete panel appears.
12. Select either "Configure and schedule a backup task" or "Finish now." Click Next. If you choose to configure and schedule a backup task, see "Configure and schedule the backup task" at the end of this section.
13. From the Desktop Shortcut dialog, choose whether or not you want to add a shortcut to The CentralControl application. Click Next. If the Agent Setup detects GUI Agent software on your system during an initial install, the Upgrade dialog appears. You are prompted to select either Upgrade my GUI Agent software to the new version or Do not upgrade just install the new software. If you choose to upgrade, all data files are automatically converted for compatibility and the GUI Agent is removed. If you choose to upgrade later, your GUI Agent software will remain operational. You can upgrade at a later date by uninstalling the Agent and performing a fresh install.
14. Once the installation is complete, click Finish.

NOTE: Both OTM and OFM must NEVER be installed on the same system.

Configuring and Scheduling the Backup Task:

1. If you choose to configure and schedule the backup, the "Backup Task Setup" panel appears. This panel lists the information you must have to proceed with the task creation. You will require:
2. Host name/IP address of the Director (VAULT.ASIGUARDIAN.COM).
3. Your account designation (arranged by calling 859-885-1499).
4. User name and password
5. Backup task file (supplied by service provider). This data is optional.
6. Click Next. The "Vault Director Settings" panel appears. Fill in the fields with information supplied by your service provider. Click Next. The "Backup Task Name" panel appears.
7. Enter the name of your task. The name must be from 1-8 characters long and can contain the characters A-Z, a-z, 0-9, _-\$. Click Next. The "Backup Task File Options" panel appears.
8. If you have a new task file, supplied by your service provider, enter or browse for the location. If you do not have a task file, select "Create a backup task with default settings." The default task is saved in the installation directory. Click Next. The default options screen appears.
9. The default options screen lists what drives are set to back up, . Click Next. The "Command Cycle" panel appears. Select either a weekly or monthly backup cycle. Click Next.
10. If you choose Weekly, the "Command Cycle – Weekly" panel appears. Select the days of the week and time you want the backup to execute. Click Next. The "Desktop Shortcut" dialog appears. See step six in the previous section to complete the installation.

Agent for NetWare Installation

This section describes how to install the Agents for NetWare. You must have the Agent for NetWare installation kit and a NetWare server running version 4.2 or greater. To configure and manage the Agent for NetWare, the CentralControl program must be installed on a 32-bit Windows system.

System Requirements

HARDWARE

- ⌘ CPU
 - Minimum: Intel 80486 or 100% Compatible
 - Recommended: Pentium 90 or faster
 - NOTE: If your operating system suggests different minimum hardware requirements, employ whichever system is greater
- ⌘ RAM – 64 MB or more recommended
- ⌘ HDD – 10 MB of available disk space

SOFTWARE

- ⌘ OS – NetWare version 4.2 or greater
 - OS PATCHES
 - ⌘ Support Pack 6 (IWSP6.EXE) (Version 4.x)
 - ⌘ CLIB.NLM (Version 5.01a or greater)
 - Network – 4.01G
 - ⌘ A TCP/IP stack
 - ⌘ Optional software for NetWare:
 - ? Open File Manager – OFM 8.1

NOTE: The Agent 4.1 is NOT to be installed as an upgrade to previous versions of the Agent program. The Agent program is designed for new installation ONLY.

PRIVILEGE REQUIREMENTS

- ⌘ Under 4.2 or greater, the user that is specified has an ADMIN account, an account with security equal to ADMIN, or an account with Supervisor rights to the [root] object of the NDS Tree.

Installation Procedure

Listed here are two installation options:

	Typical (Recommended)	NetWare Console from Floppy
1.	Start installation Program (Agent-NetWare.exe) from a workstation running NetWare Client	Start installation Program (Agent-NetWare.exe)
2.	Choose Typical	Choose "Create Installation Media"
3.	Select a Server	Select A: (5 Blank Disks Required)
4.	Finish Installation Program	Finish Installation Program
5.		
6.		Walk over to server
7.		Run INSTALL.NLM or NWCONFIG.NLM (see below *)
8.	Edit AUTOEXEC.NCF (see below **)	Edit AUTOEXEC.NCF (see below **)

Typical Installation Process

- 1) Log onto a system that is running the NetWare Client as an admin/supervisor
- 2) Locate and launch the AGENT-NETWARE.EXE installation program
- 3) From the Welcome dialog, click **Next**. A Viewer Appears
- 4) From the viewer screen, Users can read support notes and service contact information, as well as product release notes. Click **Next** to proceed.
- 5) On the OLB Software License Agreement panel, select **Accept** and **Next**.
- 6) On the OLB Encryption License Agreement panel, select **Accept** and **Next**.
- 7) Select the Netware Server on which you wish to install the StorageCARE OLB Agent
- 8) Choose the path (Default: SYS:\Evault), then choose **Next**
- 9) Enter the following information:
 - a. USERNAME – someone with .admin equivalent permissions
 - b. PASSWORD – current password for the User selected
 - c. IP ADDRESS – VAULT.ASIGUARDIAN.COM
- 10) Edit the AUTOEXEC.NCF file and add the following lines:
 - a. SEARCH ADD SYS:\EVAULT
 - b. LOAD VVAGENT
- 11) From the server console, load VVAGENT

NetWare Console from Floppy Installation Process

* Running *INSTALL.NLM* or *NWCONFIG.NLM*

- 1) At the NetWare Console, Type "**Load Install**" or "**Load NWCONFIG**"
- 2) Select **Product Options**
- 3) Select **Install Product Not Listed**
- 4) From a local NetWare machine, press **F3** to specify a directory path. If you are performing a remote NetWare console installation, press **F4** to access your Windows directories
- 5) Enter the path of the DISK1
 - a. "**A:**\"

- b. Select **Install Product** to begin the installation
- c. Answer "**YES**" to start the installation

NOTE: After the completion of the installation, a reboot is NOT required. However, if you are re-installing the product, the VVAGENT.NLM will have to be UNLOADED prior to the installation and LOADED again.

*** Editing AUTOEXEC.NCF*

To permanently install the Agent for NetWare so that it is started after each reboot of the NetWare server, add the commands below to the AUTOEXEC.NCF command procedure.

To edit the AUTOEXEC.NCF file, load the EDIT.NLM and open the AUTOEXEC.NCF file. Add the following lines after the point where the TCP/IP stack has been loaded and configured (end of file is good) and save the changes before closing:

- 1) SEARCH ADD SYS:\EVAULT\
2) LOAD VVAGENT

Uninstall Procedure

Remove the following lines from AUTOEXEC.NCF:

- 1) SEARCH ADD SYS:\EVAULT\
2) LOAD VVAGENT

Troubleshooting

- 1) Confirm Name Resolution: There may be a need to configure the SYS:\ETC\RESOLV.CFG
 - a. Entry should resemble:
NAME SERVER IPADDRESS
 - b. Test by loading PING.NLM and try to receive a response from VAULT.ASIGUARDIAN.COM
 - i. NOTE: Customer Firewalls may prevent ICMP Traffic

Agent for Linux Installation

This section describes how to install the Agent for Linux. The installation requires that you have the Agent for Linux Installation kit and a system running Red Hat Linux 7.1. To communicate with, configure and manage the Agent for Linux, the CentralControl program needs to be installed on a separate 32-bit Windows system.

System Requirements

HARDWARE

- ⌘ CPU
 - Minimum: Intel 80486 or 100% Compatible
 - Recommended: Pentium 90 or faster
 - NOTE: If your operating system suggests different minimum hardware requirements, employ whichever system is greater
- ⌘ RAM – 64 MB or more recommended
- ⌘ HDD – 10 MB of available disk space

SOFTWARE

- ⌘ OS – Red Hat Linux 7.1

PRIVILEGE REQUIREMENTS

- ⌘ To extract the installation files for the Agent for Linux, no special privileges are required. However, to run the install script, you must have "root" privileges.

Installation Procedure

The Agent for Linux Installation kit is available with the file name Agent-Linux.tar. This file contains all the components necessary to install the Agent for Linux.

1. Log onto the system
2. Download the file Agent-Linux.tar
3. Extract the files from the tar file. To do so, type the following:
 - a. `tar -xvPf Agent-Linux.tar`
4. Then type the following:
 - a. `Cd /tmp/Agent-Linux.tar`
5. Run `install.sh`. You will be prompted for the path of the directories to be installed. The default is `usr/local/InfoStage/`.
6. Once `install` is completed, a completion message will appear and the Agent Daemon will be running.

Shared Library Usage

To run the Agent, the Agent and VV binaries are required. The required configuration files are Global.vvc and Schedule.cfg. All of these have to be in the same directory. The following libraries are required for the binaries to load and execute under RedHat Linux:

```
? libstdc++-libc6.1-1.so.2 => /usr/lib/libstdc++-libc6.1-1.so.2 (0x4001a000)
? libcrypt.so.1 => /lib/libcrypt.so.1 (0x4005c000)
? libpthread.so.0 => /lib/libpthread.so.0 (0x40089000)
? libdl.so.2 => /lib/libdl.so.2 (0x4009b000)
? libm.so.6 => /lib/libm.so.6 (0x4009e000)
? libc.so.6 => /lib/libc.so.6 (0x400ba000)
? /lib/ld-linux.so.2 => /lib/ld-linux.so.2 (0x40000000)
```

To produce this list, use the ldd command. Each line consists of the required library name and the path that ldd located the file. If ldd can not find a library, a warning is displayed.

Ldd does not list shared objects explicitly attached. Any CentralControl files that are part of a shared library (e.g. encryption) must be in the same directory with Agent and VV. For instance, VVE.so is the name of the file for the shared encryption library under Linux.

The paths for these libraries may be different than those listed above if the Agent is installed under another Linux variant.

Uninstall Procedure

1. Log onto the target system.
2. Stop the VVAgent
3. Go to the installation directory (by default /usr/local/ InfoStage /).
4. Run uninstall.sh. A message appears, asking if you want to remove the CentralControl Directory.
5. Select Yes to completely remove the Agent, including all task files and settings. Select No to remove the VV Agent service entry, executables and scripts. This choice leaves your CentralControl directory, task files and settings intact for future use.
6. If you choose to completely uninstall the VVAgent, a confirmation prompt appears. Select Yes. The message is uninstalled.

Contact Information

asiGuardian, LLC.
193 Computrex Dr.
Nicholasville, KY 40356
859-885-1499

Tom Tipton
Business Development Manager
tтиpton@asiguardian.com

StorageCARE Support Team

David Barnes
Eric Carpenter
Don Garrison

Send Questions to:
support@asiguardian.com